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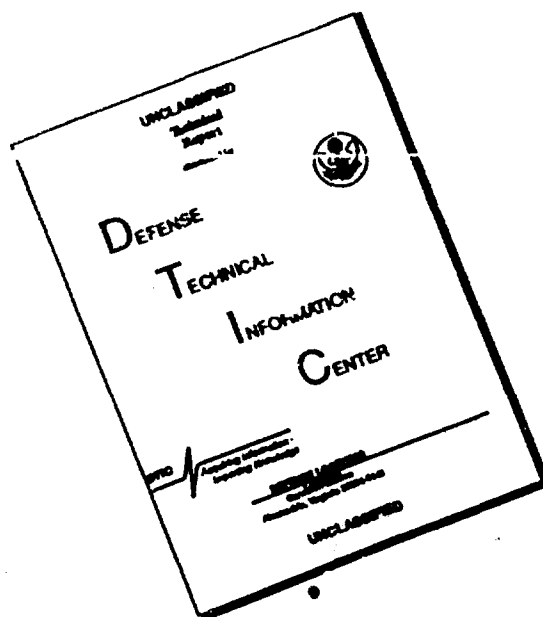
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Guseva, N.A. & Fitonova, L.I. The tularemia outbreak in Astrakhan in 1957-1958 and its causes. Zhurnal mikrobiologii, etc. 33 (1962) 7: 19-22
(From the sanitary-epidemiological station of the Astrakhan oblast).

The conclusions reached by the authors of this well-written and instructive article were:

1. As a result of a widespread tularemia epizootic in the Volga lowlands in 1957-1958 there occurred a tularemia outbreak in the town of Astrakhan, situated 40-50 km from the focus.
2. Out of a total of 179 attacks 20 were due to the hunting of water-rats in the delta raions and 159 to the bites of diptera.
3. An overwhelming majority of the vector-borne affections (82%) among the people living in the town and its vicinity was observed at the time of a prevalence of winds blowing in the direction from the epizootic focus towards the town (August-September). This factor undoubtedly played a role in the transfer of infected mosquitoes from the natural focus into the town and its vicinity.
4. Taking account of the possibility of a transfer of infected mosquitoes far beyond the borders of the foci, as exemplified by the 1957-1958 tularemia outbreak, it is indispensable considerably to enlarge the areas where anti-tularemia vaccinations are administered and to render the population of the town of Astrakhan fully immune against the infection.

The authors noted in the latter connection that during the period from the autumn of 1957 to the spring of 1959 7,128 persons had been vaccinated against tularemia in Astrakhan and its vicinity. Nevertheless 126 persons contracted tularemia in 1958. In the spring of 1959 179,499 of the people living in and around the town (i.e. 70% of the population) were vaccinated and only 6 town residents, who had visited the focus, contracted the infection.

*) In the text the authors also mention the possibility of a transport of infected mosquitoes in small river boats. Abstr./564

Sukhodoeva, G.S. To the study of the natural Q-fever focus in the Zailiiski Ala-Tau. Zhurnal mikrobiologii, etc. 33 (1962) 7: 28-32

(From the institute of regional pathology of the Academy of Sciences of the Kazakh SSR and the Gamaleia Institute of Epidemiology and Microbiology of the USSR Academy of Medical Sciences).

Investigations undertaken in an area of the Kazakhstan north-east of Alma-Ata led to the following conclusions:

1. With the aid of serological tests the presence of Q-fever infection was demonstrated in 10 species of small mammals and birds inhabiting the foot-hills of the Zailiiski Ala-Tau.
2. With the aid of guinea-pig experiments the presence of R. burneti was ascertained in four of these species - Citellus pygmaeus, C. intermedius, Meriones erythrorus and Mustela evermanni.
3. The presence of natural Q-fever infection was also established in the ticks Hyalomma scupense and Dermacentor daghestanicus.
4. For the first time in the southern Kazakhstan Q-fever cultures were isolated from C. intermedius, M. erythrorus and the tick H. scupense as well from the blood of a patient.

Timofeev, M.K. et al. An anthrax outbreak on the Arzamas-Gor'kii cattle-driving trail. Zhurnal mikrobiologii, etc 33 (1962) 7: 32-35

(From the All-Soviet scientific research institute "Mikrob" and the sanitary-epidemiological station of the Gor'kii oblast).

As described in this article, lack of an adequate supervision led to a considerable outbreak of anthrax, affecting, besides 56 heads of cattle 7 cattle-drivers and 2 employees of the meat-packing plant. As a result of this spread of the infection about 50 tons of meat had to be condemned. Ways and means to prevent such outbreaks of anthrax are discussed.

More

Alexander, N. A., Gelfand, N. I. et al. Aerosol immunization with dry EV vaccine and anatoxins. Report VIII. Study of a method of aerosol immunization of large groups of people with dry anti-plague vaccine. Zhurnal mikrobiologii, etc. 33 (1962) 7: 46-50

The authors used for their studies a dry plague vaccine prepared from the EV strain, which was dispersed with the aid of an electrical fan from a special apparatus mentioned only by its serial number (PAB-60). Immunization was done in an ordinary room with a cubic content of 112 m3 which had standing room for up to 119 persons. Altogether the method was used for 543 persons, all men 18-25 years old. From their careful observations of the immunized persons the authors concluded that

1. Aerosol immunization of man with a dry plague vaccine, used in a dosage of 150-200 million of live organisms of the vaccinal EV strain produces practically no reactions, but leads to characteristic changes in the peripheral blood of the vaccinated.

2. The method of aerosol immunization, used under practical conditions in sufficiently large groups of people, proved to be quite simple and rendered it possible to produce mass immunizations within a short period.

It is noteworthy that the authors did not test so far the immunological efficacy of their method of vaccination.

Subcutaneous vaccination with the EV strain, administered for the sake of comparison to a group of 100 young adults, led to marked local reactions in 98 and to severe general reactions in 66.

Cutaneous (epidermal) vaccination of an analogous group of 5,600 persons was not followed by severe general reactions. A local reaction was noted in 96% if the vaccinated.

Silich, V.A. & Shevzova, Z.V. Experience with combined vaccinations against brucellosis and Q fever. Zhurnal mikrobiologii, etc. 33 (1962) 7:66-72 (From the Gamaleia Institute of epidemiology and microbiology of the USSR Academy of Medical Sciences).

In conclusion of this well documented study the authors stated that combined simultaneous or consecutive administration of brucellosis and Q-fever vaccines to guinea-pigs led to an immunity against both infections which did not materially differ from the immunity produced by the corresponding monovaccines. It appeared thus possible to take practical advantage of this method of combined vaccination.

Shchepot'ev, N.V. & Popov, N.A. On the principles of an organization of anti-rodent campaigns under the conditions of railway transport. Zhurnal mikrobiologii, etc. 33 (1962) 7: 82-88

(From the Railway Anti-Plague Laboratory and the Volgogradskii sanitary-epidemiological station of the Provolzhskii railway).

This well documented study, because not lending itself to the purposes of a brief analysis, can be quoted by title only.

Bauman, V.M. Clinical and epidemiological characterization of a botulism outbreak due to the consumption of canned flounders. Zhurnal mikrobiologii, etc. 33 (1962) 7: 92-95

(From the medical service of the Pacific Fleet.

Quoted by title only.

Dashkevich, I.O. et al. To the method of processing bacteriological preparations with fluorescent antibodies. Zhurnal mikrobiologii, etc. 33(1962)7: 101-107 (From the departments of microbiology and biochemistry of the Order of Lenin Academy of Military Medicine named after Kirov.)

The technical details of this article must be studied in the original of in a translation of the text.

Vereshnina, N.K. et al. To the problem of a accelerated diagnosis of tularemia.
Report I. Detection of tularemia in rodent carcasses. Zhurnal mikrobiologii,
ect. 33 (1962) 7: 107-110

(From the institute of microbiology and epidemiology of the South-east of
the USSR ("Mikrob" Institute).

Summarizing their findings the authors stated that

1. For the purposes of a rapid diagnosis of tularemia in rodent carcasses
it is possible to make slide agglutination tests with suspensions of the triturated
spleen of the animals. Preparation and performance of these test require not
more than 10-15 minutes.

Abstr. 1517

2. The agglutination reaction is more efficacious than the methods
of precipitation and bacterioscopy, but less sensitive than animal experimentation.

3. The above described slide agglutination tests permit a diagnosis of
tularemia in 100% of the animals highly susceptible and sensitive to this in-
fection ("first group") but rarely give positive results in the little sensitive
animals of the second group.

Konchev, K.L. Sterilization of needles and instruments with the aid of glycerol.
Zhurnal mikrobiologii, ect. 33 (1962) 7: 114-116

(From the municipal hospital of Popov (Bulgaria).

Finding that even anthrax bacilli were killed by an exposure for 1/2
minute to glycerol at temperatures of 160-120 c, the author recommended the
use of this substance for the sterilization of needles and instruments for
injection.

Kniazeva, E.N. Studies of the peculiarities of the course of a mixed brucellosis
and Q-fever infection in guinea-pigs. Zhurnal mikrobiologii, ect.
33 (1962) 7: 125-130

(From the Gamaleia Institute of epidemiology and microbiology of the
USSR Academy of Medical Sciences).

The conclusions reached through these studies were that

1. Guinea-pigs, infected simultaneously, but at different sites with
virulent brucellosis and R. burneti cultures contract both brucellosis and
Q-fever. The presence of the latter disease is manifested by a period of
fever, the formation of specific infiltrations and the appearance of complement-
fixing antibodies, that of brucellosis by an abundance of brucellae in the
organs, the production of antibodies and the development of a specific allergic
state.

2. The presence of virulent brucellae in the body of the animals
evidently did not materially influence the course of Q-fever.

3. Brucellosis infection, reaching the phase of generalization after
15 days, did not exert a stimulating influence on the length and intensity
of the rickettsial infection. Still, in the guinea-pigs which had had Q-fever,
one could note a more rapid and intensive accumulation of agglutinins as well
a higher phagocytic activity of the neutrophils during the first three months,
i.e. at the acme of the brucellosis infection.

4. It may thus be postulated that under the conditions of these experiments
the mixed infection stimulated the activity of the reticulo-endothelial system
of the guinea-pigs. However, final conclusions in this respect will be possible
only after histological studies.

Sidorov, V.E. & Gubina, E.A. On the preservation of the properties of the vaccinal
strain Br. abortus 19-BA in the tick Ornithodoros lahorensis Neumann.
Zhurnal mikrobiologii, ect. 33 (1962) 7: 130-133

(From the Gamaleia Institute of epidemiology and microbiology of the
USSR Academy of medical Sciences).

The investigations of the two authors showed that a prolonged persistence
of the brucellae in the tick O. lahorensis exerted no adverse influence on the
organisms and even seemed to increase their tendency to produce a generalized
infection. As the authors added, the ticks in question could be used for a
prolonged maintenance of brucellae - up to periods of 18-22 months.

Elkin, I.I. On the ways of developing the theories of epidemiology. Zhurnal

mikrobiologii, etc. 33 (1962) 7: 137-141

This article contains the text of a report rendered by Elkin at a meeting of the section of hygiene, microbiology and epidemiology of the USSR Academy of medical Sciences convening in March 1962. The speaker claimed inter alia that cholera and smallpox had been 'liquidated' in the Soviet Union. In regard to plague he made the following statement:

"Plague is a zoonosis. The raions of its spread stand in connection with its natural foci. To liquidate plague in a given territory means to liquidate the natural foci. One may say that in principle this task is solved. At present effective methods have been worked out for the eradication of the rodents - the fundamental natural reservoirs of the infection - and of the fleas, the vectors of the infection. With the aid of these methods one may reduce the rodent populations to such a degree that the epizootic process is cut short. Two natural plague foci within the territory of the USSR have been liquidated. However, there exist still active natural foci, the liquidation of which has not been possible for various reasons. Nevertheless, in these foci also there exists no human plague, as medical science has an effective complex of prophylactic measures: prophylactic vaccination, eradication of rodents and fleas in the settlements and in protective belt (round them) and constant observations of the rodents and fleas in the natural foci with the aim of a timely detection of the appearance of epizootics. In this respect human plague has been liquidated but there exists a constant danger of its appearance among the people living in the natural foci.

Balandin, G.A. Is brucellosis an intestinal infection? Zhurnal mikrobiologii, etc. 33 (1962) 7: 141-144

(From the scientific research anti-plague institute of the USSR Health Ministry in Rostov-on-Don).

As stated in the concluding paragraphs of this amply documented article the author considers

"brucellosis first of all as an infection of the agricultural animals, in which it is maintained according to the laws governing infectious diseases of the group of intestinal (alimentary) infections. Man is in the case of brucellosis invariably an accidental recipient of the infection, playing literally no role in the epizootic process. He becomes involved in this as a result of his work for the care and exploitation of brucellosis-infected agricultural animals....For some groups of the population (workers in cattle-breeding and meat of milk processing establishments) brucellosis is an occupational danger, in which the mechanism of the infection is determined by the degree of contact with the natural reservoirs of the infection and the factors of its spread."

However, the author continued, human brucellosis was by no means always the result of contact infection. Thus consumption of raw milk or milk products obtained from brucellosis-affected animals could lead to an alimentary infection while the shearing of sheep affected by the disease might produce an air-borne infection. Brucellosis ought to be classified, therefore, in the group of infectious diseases with different routes of infection. In the author's opinion most zoonotic affections fell into this category.

Shishulina, L.M. Use of pancreatin for the detection of C1. botulinum toxin in mixed cultures. Gigiena i sanitaria 27 (1962) 6: 53-55

Quoted by title only.

L'vov, D.K. & Naumov, R.L. Transovarian transmission of the tick-encephalitis antibodies in the blackbird (Turdus pilaris L.) Meditinskaya parazitologia, etc. 40 (1962) 3: 335-338

(From the poliomyelitis and virus encephalitis institute of the USSR Academy of medical Sciences and the Martsinovskii institute of medical parasitology and tropical medicine of the USSR Health Ministry).

The conclusions reached by the two authors were that

1. A transovarian transmission of the antibodies to tick-borne encephalitis in blackbirds was confirmed.

2. There exists a direct relation between the state of humoral immunity in the female birds and the immunity level in their young.

3. The overwhelming majority of the young birds loses the immunity to tick-borne encephalitis within a week after they have first left their nests. Nefedov, V.N. & Burkovskii, V.E. Preliminary results of zoological-parasitological study of the tick encephalitis foci in the Altai krai. Meditinskaya parazitologiya, etc. 40 (1962) 3:338-341

(From the department of parasitology of the sanitary-epidemiological station of the Altai krai).

As stated in this article, the details of which do not lend themselves to the purposes of a brief review, the presence of the tick-encephalitis virus was demonstrated in 45 out of 92 lots of the tick Ixodes persulcatus and in a number of small mammals (specially voles) as well as in two species of birds. I. persulcatus was not doubt the main vector of the infection.

Pchelkina, A.A. Contributions to the study of the tick-encephalitis focus in the Kalininsk oblast. Meditinskaya parazitologiya, etc. 40 (1962) 3: 341-342

(From the department of infectious diseases with a focal occurrence ('natural focality') of the Gamaleia Institute of epidemiology and microbiology).

As can be gathered from this report, the details of which do not lend themselves to condensation, the presence of the tick-encephalitis virus could be demonstrated only in the tick Ixodes persulcatus, but not in mammalian hosts.

Darskaia, N.F. et al. Study of the annual cycle of the gerbil-flea Xenopsylla conformis Wagn. in Azerbaidzhan. Meditinskaya parazitologiya, etc. 40 (1962) 3: 342-346

(From the scientific research anti-plague institute of the Caucasus and Transcaucasus and the Azerbaidzhan anti-plague station).

Quoted by title only.

Larinkhin, M.A. et al. Experience on the small-droplet spraying of insecticides from airplanes in the fight against the vectors of tickborne encephalitis in the Anzhero-Sudzhenski raion during the period 1957-1959. Meditinskaya parazitologiya, etc. 40 (1962) 3: 347-351 (From the department of entomological toxicology and disinsectisation of the E.N. Martsinovski institute of medical parasitology and tropical medicine of the USSR Health Ministry, the Government scientific research institute of the civilian air fleet and the Anzhero-Sudzhenski municipal sanitary-epidemiological station).

As stated in this report, the spraying of DDT emulsions and of polychloro-pinene in the taiga forests of the above mentioned district in the Kemerovo oblast (Central Siberia) from airplanes led to a disappearance of tick-encephalitis attacks in 1958 and 1959, whereas 15 cases of the disease had been recorded in 1956-1957.

Berendiaeva, E.L. & Kul'kova, N.A. To the ecology of the fleas of the grey marmot. Trudy Sredne-Aziatskogo nauchno-issledovatel'skogo protivochumnoy instituta 7 (1962):

- Bibikova, D.I. & Cherkalin, V.B. To the knowledge of the ectoparasites in the corridors of the marmot burrows and evaluation of the methods of collecting Aksai. Ibidem, 361-363
- Shvarts, E.A. et al. On the infectibility of the arthropods in the nests and furs of marmots with plague. Ibidem, 189-191
- Shvarts, E.A. et al. Distribution and frequency of fleas in the nests of marmots and their epidemiological importance. Ibidem, 41-54
- These five articles are quoted by title in a reference list inserted in the journal Meditainskaia parazitologia, etc.